Diagram

1903 | Syllabus: Syllabus of a course of Lectures at the Lowell Institute beginning 1903, Nov. 23. On Some Topics of Logic | EP 2:273; CP 2.277

Hypoicons may be roughly divided according to the mode of Firstness of which they partake. Those which partake of simple qualities, or First Firstnesses, are *images*; those which represent the relations, mainly dyadic, or so regarded, of the parts of one thing by analogous relations in their own parts, are *diagrams*; those which represent the representative character of a representamen by representing a parallelism in something else, are *metaphors*.

1903 | Logical Tracts. No. 2. On Existential Graphs, Euler's Diagrams, and Logical Algebra | CP 4.418

A *Diagram* is a representamen which is predominantly an icon of relations and is aided to be so by conventions. Indices are also more or less used. It should be carried out upon a perfectly consistent system of representation, one founded upon a simple and easily intelligible basic idea.

1904 | New Elements (Kaina stoiceia) | EP 2:303

A *diagram* is an *icon* or schematic image embodying the meaning of a general predicate; and from the observation of this *icon* we are supposed to construct a new general predicate.

1906 | Prolegomena to an Apology for Pragmaticism | CP 4.531

Now reasoning has to make its conclusion manifest. Therefore, it must be chiefly concerned with forms, which are the chief objects of rational insight. Accordingly, Icons are specially requisite for reasoning. A Diagram is mainly an Icon, and an Icon of intelligible relations. It is true that what must be is not to be learned by simple inspection of anything. But when we talk of deductive reasoning being necessary, we do not mean, of course, that it is infallible. But precisely what we do mean is that the conclusion follows from the form of the relations set forth in the premiss. Now since a diagram, though it will ordinarily have Symbolide Features, as well as features approaching the nature of Indices, is nevertheless in the main an Icon of the forms of relations in the constitution of its Object, the appropriateness of it for the representation of necessary inference is easily seen.

1906-09-05 | The Logic Notebook | MS [R] 339:286r

The purpose of a Diagram is to represent certain relations in such a form that it can be transformed

into another form representing other relations involved in those first represented and this transformed icon can be interpreted in a symbolic statement.

It is necessary that the Diagram should be an Icon in which the inferred relation should be perceived. And it is necessary that it should be insofar General that one sees that accompaniments are no part of the Object.

The Diagram is an Interpretant of a Symbol in which the signification of the Symbol becomes a part of the object of the Icon.

No other kind of sign can make a Truth *evident* for the *evident* is that which is presented in an image, leaving for the work of the understanding merely the Interpretation of the Image in a Symbol.

Corrected 2017/12/05 by Winfried Nöth

1906-7 | PAP [ed.] | NEM 4:316

...a Diagram is an Icon of a set of rationally related objects. By *rationally* related, I mean that there is between them, not merely one of those relations which we know by experience, but know not how to comprehend, but one of those relations which anybody who reasons at all must have an inward acquintance with. This is not a sufficient definition, but just now I will go no further, except that I will say that the Diagram not only represents the related correlates, but also, and much more definitely represents the relations between them, as so many objects of the Icon.

1906-7 | PAP [ed.] | NEM 4:315-316n1

A Diagram, in my sense, is in the first place a Token, or singular Object used as a Sign; for it is essential that it should be capable of being perceived and observed. It is, however, what is called a General sign; that is, it denotes a general Object. It is, indeed, constructed with that intention, and thus represents the Object of that intention. Now the Object of an intention, purpose, or desire is always General. The Diagram represents a definite Form of Relation. This Relation is usually one which actually exists, as in a map, or is intended to exist, as in a Plan. But this is so far from being essential to the Diagram as such, that if details are added to represented existential or experiential peculiarities, such additions are distinctly of an undiagrammatic nature. The pure Diagram is designed to represent and to render intelligible, the Form of Relation merely. Consequently, Diagrams are restricted to the representation of a certain class of relations; namely, those that are intelligible.